

### **REMARKS**

This Amendment is responsive to the Office Action dated January 27, 2005. Applicant has amended claims 1, 6, 7, 9, 20, 21, 25, 27, 28, 30, 32, 34, 35 and 37; canceled claims 2, 5, 26, 29, 31, 33, 36 and 38; and added new claim 39. Claims 1, 3, 4, 6-25, 27, 28, 30, 32, 34, 35, 37 and 39 are now pending.

#### **Claim Rejection Under 35 U.S.C. § 101**

In the Office Action, the Examiner rejected claims 1-38 under 35 U.S.C. 101 as lacking specific utility. The Examiner stated that it is not clear from the claim language what the invention is directed toward, and further stated that the claimed invention lacks patentable utility insofar as none is cited in the claims.

Applicant disagrees with the Examiner, and traverses the Examiner's rejections under 35 U.S.C. 101 for the reasons identified below. However, notwithstanding this traversal, Applicant notes that the current claim amendments should address the Examiner's concerns with respect to utility.

According to the Court of Appeals for the Federal Circuit, in order to comply with 35 U.S.C. 101, the claimed invention must embody a concrete, tangible and useful result. See *State Street Bank & Trust Co. v. Signature Financial Group*, 149 F.3d 1368 (CAFC 1998). The previous claims met this standard insofar as the previous claims recited the generation of a filtered bit map, which is a concrete, tangible and useful result.

Moreover, with respect to the utility requirements of 35 U.S.C. 101, the Court of Appeals for the Federal Circuit has stated that "to violate § 101 the claimed invention must be totally incapable of achieving a useful result." See *Brooktree Corp. v. Advanced Micro Devices* 977 F.2d 1555 (CAFC 1992). The generation of a filtered bit map, as recited in Applicant's claims, is a useful result. Therefore, Applicant's claims do not lack utility and do not violate § 101.

In any case, Applicant believes that the amended claims even more clearly comply with the requirements of 35 U.S.C. 101, insofar as the current claims now clarify that the techniques and systems are specifically for reducing ink coverage for inkjet printing. Moreover, all claims (except for new claim 39) specifically recite the generation of a filtered bit map for an inkjet printer. Therefore, the claims clearly comply with the utility requirements of 35 U.S.C. 101.

As examples of the usefulness of features recited in Applicant's claims, Applicant notes that techniques of reducing ink coverage are useful, e.g., to ensure that normal text does not appear bold, and ink coverage reductions can avoid "false moiré," or other unwanted artifacts within an image. See Applicants Specification at page 3, lines 6-7. In addition, ink coverage reductions can promote more efficient use of ink, and can ensure that print substrates do not become oversaturated. See Applicants Specification at page 3, lines 7-9. Applicant's claims are useful, in compliance with 35 U.S.C. 101.

With respect to new claim 39, this new claim recites a method of reducing ink coverage for a halftone printing device, and clearly complies with 35 U.S.C. 101 insofar as claim 35 recites the generation of a filtered bit map for the halftone printing device, which is a concrete useful and tangible result.

In view of the amendments to the claims and comments above, Applicant respectfully submits that all claims comply with the utility requirements of 35 U.S.C. 101.

#### **Claim Rejections Under 35 U.S.C. § 102 and 35 U.S.C. § 103**

In the Office Action, the Examiner rejected claims 1-4, 15, 18, 19, 25, 28, 30 and 32 under 35 U.S.C. 102(b) as being anticipated by Ichibanagi (US 5,113,251), and rejected claims 16, 31 and 33 under 35 U.S.C. 103(a) as being unpatentable over Ichibanagi.

The Examiner indicated that claims 20-24, 27 and 34-38 include allowable subject matter, and objected to claims 5-14, 17, 26 and 29 as being dependent upon a rejected base claim. The Examiner indicated that these claims would be allowable if the rejections under 35 U.S.C. 101 are overcome.

In this response, Applicant has amended independent claims 1 and 25 to include the features recited in claim 5, which the Examiner indicated as allowable subject matter. In addition, Applicant amended claim 28 to include the features previously recited in claim 29, which the Examiner indicated as allowable subject matter. Similar features are also recited in new claim 39. Applicant believes that all pending claims are now in condition for allowance.

Applicant has also amended independent claims 1, 20, 25, 27, 28 and 34 to clarify that these claimed inventions are directed to reducing ink coverage in inkjet printing. In addition, all of these claims now require the generation of a filtered bit map for an inkjet printer. As outlined

above, Applicant believes that these amendments should overcome any remaining issues under 35 U.S.C. 101 with respect to utility. Moreover, the amendments to claims 1, 20, 25, 27, 28 and 34 clarify that these claimed inventions are for reducing ink coverage in inkjet printing, and further distinguish these claims from the prior art of record.

#### **New claim**

New claim 39 has been added. New claim 39 recites a method of reducing ink coverage for a halftone printing device comprising generating a monochromatic halftone bit map of a channel of a color image to be printed by the halftone printing device; and applying a bit map filter to the monochromatic halftone bit map to generate a filtered bit map for the halftone printing device by passing a target glyph over the monochromatic halftone bit map, comparing the target glyph to a number of subsets of bits in the monochromatic halftone bit map, and replacing a particular subset of bits with the thinned glyph when the target glyph matches the particular subset of bits, wherein applying the bit map filter begins prior to finalizing the generating of the monochromatic halftone bit map. New claim 39 should be in condition for immediate allowance.

#### **Supplemental Information Disclosure Statement**

A supplemental Information Disclosure Statement (IDS) is being submitted in parallel with this response. The supplemental IDS cites a Written Opinion recently received in relation to a related foreign application. Applicant respectfully requests that the Examiner consider the material submitted in the supplemental IDS, and return an initialized copy of the form 1449 to Applicant.

Applicant notes that the prior art applied in the Written Opinion has been cited to the Examiner in a previous IDS. In addition to any distinctions that the Examiner may have identified, Applicant further notes that the prior art applied in the Written Opinion does not relate to reductions of ink coverage for inkjet printing, as required in Applicant's independent 1, 20, 25, 27, 28 and 37, and does not include any suggestion of the application of a bit map filter prior to finalizing the generating of the monochromatic halftone bit map, as recited in new claim 39.

**Conclusion**

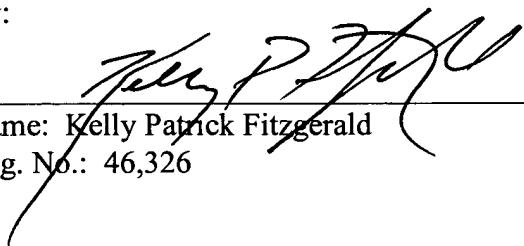
In view of the claim amendments and foregoing remarks, all claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

April 22, 2005

SHUMAKER & SIEFFERT, P.A.  
8425 Seasons Parkway, Suite 105  
St. Paul, Minnesota 55125  
Telephone: 651.735.1100  
Facsimile: 651.735.1102

By:

  
Name: Kelly Patrick Fitzgerald  
Reg. No.: 46,326